Special Issue

Enzyme Bioreactor Design

Message from the Guest Editors

Enzyme catalysis has been exploited in many industrial applications. In particular, technologies for immobilization of enzymes and their use as industrial biocatalysts in multiphase reactors offer numbers of opportunities to develop new enzymatic processes in most of the fields having central role in the establishment of green economy. Among these fields, biorefinery platforms, CO2 capture and utilization processes, bio-based productions of commodity chemicals can be enriched with novel strategies and technologies based on the use of enzyme biocatalysts. The successful development of enzymatic processes up to industrial scale is strongly related to the design of bioreactors configurations enabling the efficient use of the enzyme biocatalyst. This special issue is intended for research and review articles on enzyme bioreactors design and development. Contribution dealing with but not limited to enzyme bioreactors for the following applications are welcome. - Biorefinery processes - Novel enzyme technologies for CO2 utilization purposes - Bio-based product, continuous production and downstream integration - Multiphase systems for enzyme use in non-aqueous solvents

Guest Editors

Dr. Maria Elena Russo

Istituto di Scienze e Tecnologie per l'Energia e la Mobilità Sostenibili-Consiglio Nazionale delle Ricerche, Napoli, Italy

Dr. Giuseppe Olivieri

Bioprocess Engineering Group, Wageningen University and Research, 6700AA Wageningen, The Netherlands

Deadline for manuscript submissions

closed (20 September 2022)

Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 7.6

mdpi.com/si/53229

Catalysts
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
catalysts@mdpi.com

mdpi.com/journal/catalysts

Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 7.6

mdpi.com/journal/catalysts

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Keith Hohn
Carl R. Ice College of Engineering, Kansas State University, Manhattan, KS, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, CAB Abstracts, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Physical) / CiteScore - Q1 (General Environmental Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

MDPI